

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Mikio SASAKI et al.

Serial No.: 10/608,002

Filed: 06/30/2003

Title: **VOICE INTERACTIVE COMPUTER  
SYSTEM**



Patent No.: 7,640,164

Issued: December 29, 2009

Atty. Dkt.: 11-168-RCE

Commissioner for Patents  
Alexandria, VA 22313-1450  
Mail Stop: Certificate of Corrections

Date: June 10, 2010

**REQUEST FOR CERTIFICATE OF CORRECTION**

Sir:

Applicants hereby request that the above-identified Letters Patent be amended to correct the title of the invention in item (54) on the first page of the patent. Specifically, the title of the invention in the Letters Patent should be corrected to read as:

**(54) VOICE INTERACTIVE COMPUTER SYSTEM**

No amendment was made to the title of the invention during prosecution. The correct title was provided in the Notice of Allowance mailed on August 14, 2009.

A Copy of the Notice of Allowance of August 14, 2010 is attached as proof that this error was due to a mistake made by the USPTO.

Applicants also request that the attached Certificate of Correction be attached to all copies of the Letters Patent. To facilitate the above request, a copy of the original letters patent is enclosed.

Although it is believed there are no fees due at this time, authorization is hereby given to charge any unforeseen fees to Deposit Account 50-1147.

Respectfully submitted,

David G. Posz  
Reg. No. 37,701

Posz Law Group, PLC  
12040 South Lakes Drive, Suite 101  
Reston, VA 20191  
(703) 707-9110  
Customer No. 23400

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,640,164  
APPLICATION NO.: 10/608,002  
ISSUE DATE : December 29, 2009  
INVENTOR(S) : Mikio Sasaki et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

### Title Page

Please correct the title of inventors in item (54) of the above-identified Letters Patent to reflect to changes below:

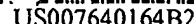
(54) VOICE INTERACTIVE COMPUTER SYSTEM

### MAILING ADDRESS OF SENDER (Please do not use customer number below):

Posz Law Group, PLC  
12040 South Lakes Drive, Suite 101  
Reston, VA 20191

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*



(10) Patent No.: US 7,640,164 B2  
(45) Date of Patent: Dec. 29, 2009

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 709 days.

US 2004/0006483 A1 Jan. 8, 2004

Jul. 4, 2002	(JP)	.....	2002-195904
Jul. 29, 2002	(JP)	.....	2002-219764
Sep. 17, 2002	(JP)	.....	2002-269941

(58) **Field of Classification Search** ..... 704/251,  
704/258, 270, 272, 275; 382/118; 463/1,  
463/23

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,145,993	A *	8/1964	Archer .....	273/238
4,439,161	A *	3/1984	Wiggins et al. ....	434/201

(54) VOICE INTERACTIVE  
COMPUTER SYSTEM

JP A-UM

(Continued)

## OTHER PUBLICATIONS

Abe et al, "WebMessenger: A New Framework to Produce Multimedia Content by Combining Synthesized Speech and Moving Pictures in the WWW Environment," Proc. Of MMSP, 1999, pp. 611-616.\*

(Continued)

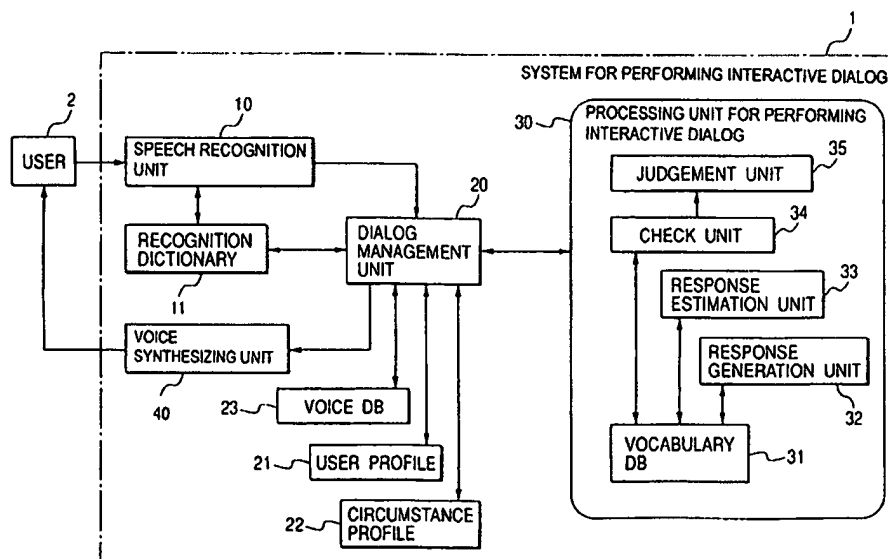
*Primary Examiner*—James S Wozniak

(74) *Attorney, Agent, or Firm*—Posz Law Group, PLC

(57) **ABSTRACT**

The system for performing interactive dialog of the present invention recognizes a question from a user and outputs an answer by a synthesized voice. The system includes; a selection unit for selecting the answer from a database; an evaluation unit for evaluating a dialog between the user and computer and determining whether or not to continue the dialog. The evaluation unit may evaluate a dialog consistency, or dialog circumstance. Further, the selection unit selects and combines on the basis of the determination result the answer with one of a plurality of dialog sentences. The system may further comprises a learning unit for storing a novel answer unknown to the computer, by interrogating the user about the novel answer and further storing the interrogation scenario.

**19 Claims, 12 Drawing Sheets**





## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
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## NOTICE OF ALLOWANCE AND FEE(S) DUE

23400

7590

08/14/2009

POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191

AUG 17 2009

EXAMINER

WOZNIAK, JAMES S

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 08/14/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,002

06/30/2003

Mikio Sasaki

11-168 *RCE*

8200

TITLE OF INVENTION: VOICE INTERACTIVE COMPUTER SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/16/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

## I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax** (571)-273-2885

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

23400 7590 08/14/2009

POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191



Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,002	06/30/2003	Mikio Sasaki	11-168	8200

TITLE OF INVENTION: VOICE INTERACTIVE COMPUTER SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/16/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
WOZNIAK, JAMES S	2626	704-272000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,002	06/30/2003	Mikio Sasaki	11-168	8200

23400 7590 08/14/2009

POSZ LAW GROUP, PLC  
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RESTON, VA 20191



EXAMINER
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WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 08/14/2009

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 709 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 709 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.



# **Notice of Allowability**

**Application No.**

10/608,002

**Applicant(s)**

SASAKI ET AL.

**Examiner**

JAMES S. WOZNIAK

**Art Unit**

2626

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address–**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment After Final filed on 8/7/2009.
2. ☒ The allowed claim(s) is/are 73-79, 81-89, 91-92, and 94 (now claims 1-19).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

**DETAILED ACTION**

***Response to Amendment***

1. In response to the office action from 5/11/2009, the applicant has submitted an amendment after final, filed 8/7/2009 amending independent claims 73 and 82-83 to incorporate the allowable subject matter previously indicated with respect to previous claim 93 (*Office Action from 5/11/2009*) (*Amendment, Page 11*). As these claims now incorporate the claim containing allowable subject matter and all intervening claims, claims 73-79, 81-89, 91-92, and 94 are allowable over the prior art of record for the reasons set forth below.

2. In response to amended claim 77 (*Amendment, Page 11*), the examiner has withdrawn the previous objection directed to minor informalities.

3. In response to the cancellation of claim 80 (*Amendment, Page 11*), the examiner has withdrawn the previous objection directed towards minor informalities. Also, this subject matter has been incorporated into claim 73 with the informalities corrected, thus precluding any type of related objection of this claim.

4. In response to amended claim 82, which eliminates the claim language not described in the originally filed specification (*i.e.*, “*computer program product*”) and incorporates “computer



readable memory medium” which is supported by the specification (*for example, Page 39*), the examiner has withdrawn the previous 35 U.S.C. 112, first paragraph rejection.

***Allowable Subject Matter***

5. **Claims 73-79, 81-89, 91-92, and 94** are allowable over the prior art of record.

6. The following is an examiner’s statement of reasons for allowance:

With respect to independent claims 73, 82, and 83, the prior art of record fails to explicitly teach or fairly suggest, either individually or taken in combination, a respective shiritori word chain game system, computer readable memory medium, or method utilizing a speech recognizer and featuring a means for allowing a system to generate a spoken word or phrase output that continues the game in response to determining that a user has spoken an utterance which breaks a shiritori game rule (*i.e., the first letter(s) of the user's spoken word do not match the last letter(s) of the computer's previous voice output*), wherein the word for continuing a word chain game after a user has uttered a rule-breaking utterance is selected based on an impression of a user determined based on a previous step in the interactive game dialog. The examiner notes that although Patinkin et al (*WO 01/91466 A2*) does teach continuing a game after a user enters a rule breaking input (*Page 31, Lines 20-28; and Figs. 4A and 4C*) and Miyasato (*JP2001-190930*) teaches the selection of user difficulty levels (*Page 18*), none of the prior art of record, either individually or taken in combination, teaches that a computer shiritori game system selects the continuing word after a user's rule-breaking input based on a impression of a user determined based on a previous game dialog step. Thus, claims 73, 82, and 83 are

Art Unit: 2626

allowable over the prior art of record. Dependent claims 74-79, 81, 84-89, 91-92, and 94 further limit allowable independent claims, and thus, are also allowable over the prior art of record by virtue of their dependency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached at (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/James S. Wozniak/  
Primary Examiner, Art Unit 2626